

U. S. GOVERNMENT

REGIONAL FORESTER, FOREST SERVICE, OGDEN, UTAH

61-TM-69

1380 (5200)

November 9, 1961

TO: Forest Supervisors

FROM: Joel L. Frykman, Assistant Regional Forester

SUBJECT: Reports

Attached for your information is a copy of our memorandum of October 27, 1961 to the Chief concerning the region's pest control problems and needs.

Also included are copies of the project proposal(s) for your area.

As you will read, we were asked to set priorities on projects because of fund limitations. The priority listing was reviewed and approved by the Regional Forester and staff prior to submission to the Chief.

There is no surety that priorities will remain the same until treating time. Biological conditions often change during the winter and spring. Early spring evaluations will have to be made on each of the infestations in order to set the final priorities for whatever control funds the region receives.

cc: D

Joel L. Frykman

UNITED STATES GOVERNMENT

REGIONAL FORESTER, FOREST SERVICE, OGDEN, UTAH

C O P Y

1380 (5200)

TO: Chief, Forest Service, Washington D. C. DATE: October 27, 1961

FROM: Floyd Iverson, Regional Forester, By

SUBJECT: Reports

AIR MAIL

Attached are the Region Four project reports for infestations recommended for control during the calendar year 1962.

The following is offered by way of explanation:

All Region Four projects in need of control have been shown in their entirety on the project proposal sheets. Eliminations of a number of other projects submitted by the forest supervisors were made in this office for various reasons, but primarily because of questionable justification either entomologically or because of low values involved. The sixteen projects recommended for control have been thoroughly screened by the entomologists and the regional forester's staff before being passed for submission to your office.

Page 1 of the attachment is a summary sheet upon which the sixteen projects have been grouped and listed according to attacking insect but not by priority.

Page 2 of the attachment is our listing of the projects by priorities. You will note that two of the projects, the North Slope (Wasatch mountain pine beetle) and spruce budworm have been split on this listing of priorities. We believe there is a good possibility of containment of the North Slope infestation with the amount of treating already accomplished this fall plus expenditure of \$300,000 of FY 1962 funds in the spring of 1962. The spruce budworm project was split on natural control boundaries and is therefore a feasible dual-year project. We will concede that the partial budworm project was accorded ninth priority, ahead of some bark beetle projects, because of the known commitment of some of the W. O. contingent funds for this purpose. Otherwise we would have placed it in last priority along with the remainder of the spruce budworm because serious losses, although imminent, are still possibly another year away.

The two Engelmann spruce bark beetle projects have not been shown on the priority listing because only FY 1963 funds are needed for control and we did not wish to confuse the issue of priorities for FY 1962 funds.

Pages 3 to 11 of the attachment are in the order of justification statements for priorities as they were presented to staff. We have included

Chief, Forest Service, Washington D. C., 10/27/61

them for your review because they explain briefly the reasoning behind the priority selections and also provide some background information.

Following page 11 you will find the form 5200-10 project proposal sheets for all of the Region Four projects as listed on the summary sheet. We have not attempted to provide project proposals for the split projects shown in the priority listing, but will do so if you wish.

A small-scale map showing project locations is also attached.

We feel that Mr. Benedict is sufficiently acquainted with the Region Four situation that there is no need for us to discuss further the seriousness of the conditions confronting us or the need for funds. We recognize, also, that some difficult decisions will have to be made.

We very much appreciate the consideration given the region's needs in the past.

If any additional information is needed, please let us know.

Attachments

xc - Chief

cc - D

Donald Parker

SUMMARY OF TOTAL REGION FOUR NEEDS
(For Treating to July 15, 1962, Plus Surveys)*
Not a Listing By Priorities

| <u>Project</u> | <u>No. Trees</u> | <u>FY 1962</u> | <u>FY 1963</u> | <u>Total</u> |
|--|------------------|----------------|----------------|--------------|
| <u>Mountain Pine Beetle</u> | | | | |
| 1. North Slope - Wasatch N. F. | 252,100 | 1,037,000 | 271,000 | 1,308,000 |
| 2. Provo River - Wasatch N. F. | 30,000 | 176,000 | 45,200 | 221,200 |
| 3. Summit Springs - Ashley N. F. | 32,000 | 200,000 | 40,000 | 240,000 |
| 4. Moon Lake - Ashley N. F. | 1,450 | 10,000 | 1,000 | 11,000 |
| 5. Yellowstone-Hell's Canyon - Ashley N. F. | 5,000 | 32,000 | 5,500 | 37,500 |
| 6. Miners Gulch - Ashley N. F. | 2,000 | 11,000 | 1,000 | 12,000 |
| 7. Oweep Creek - Ashley N. F. | 30,000 | 250,000 | 50,000 | 300,000 |
| 8. North Teton - Teton N. F. | 48,800 | 246,000 | 13,000 | 259,000 |
| 9. South Teton - Teton N. F. | 1,600 | 7,300 | --- | 7,300 |
| 10. Targhee - Targhee N. F. | 15,550 | 76,500 | 12,400 | 88,900 |
| 11. Skinner-Co-op - Cache N. F. | 1,500 | 7,200 | 1,100 | 8,300 |
| 12. McCall - Payette N. F. | 5,500 | 6,400(25%) | --- | 6,400 |
| 13. Minor Projects | 9,000 | 35,000 | 10,000 | 45,000 |

Engelmann Spruce Beetle

| | | | | |
|------------------------------------|--------|-----|----------|---------|
| 14. Monticello - Manti-LaSal N. F. | 1,000 | --- | 9,200* | 9,200 |
| 15. Green River - Bridger N. F. | 11,000 | --- | 110,000* | 110,000 |

Spruce Budworm

(Acres)

| | | | | |
|---|-----------|-----------|---------|-----------|
| 16. Salmon, Targhee, Challis, Payette and Boise Nation Forests | 1,422,000 | 1,350,000 | 72,000 | 1,422,000 |
| TOTALS | ----- | 3,444,400 | 641,400 | 4,085,800 |

*Projects marked with asterisks are the only ones included which show fall treating needs.

SUGGESTED CONTROL PRIORITIES
and Funds Needed
(FY 1962 Only)

| <u>Suggested Priority</u> | <u>Project</u> | <u>Forest</u> | <u>FY 1962 Needs</u> | <u>Cumulative Total FY 1962 Needs</u> |
|-------------------------------|------------------------------|--|--------------------------|---|
| 1. | *North Slope | Wasatch | \$ 300,000 | \$ 300,000 |
| 2. | North Teton | Teton | 246,000 | 546,000 |
| 3. | Provo River | Wasatch | 176,000 | 722,000 |
| 4. | Summit Springs | Ashley | 200,000 | 922,000 |
| 5. | Targhee | Targhee | 76,500 | 998,500 |
| 6. | *North Slope | Wasatch | 737,000 | 1,735,500 |
| 7. | Yellowstone-Hell's Canyon | Ashley | 32,000 | 1,767,500 |
| 8. | Moon Lake | Ashley | 10,000 | 1,777,500 |
| 9. | *Spruce Budworm | Salmon) Targhee) (352,000 ac.) | 400,000 | 2,177,500 |
| 10. | Oweep Creek | Ashley | 250,000 | 2,427,500 |
| 11. | McCall | Payette | 6,400 | 2,433,900 |
| 12. | South Teton | Teton | 7,300 | 2,441,200 |
| 13. | Skinner - Co-op | Cache | 7,200 | 2,448,400 |
| 14. | Minor Projects | ----- | 35,000 | 2,483,400 |
| 15. | Miners Gulch | Ashley | 11,000 | 2,494,400 |
| 16. | *Spruce Budworm | Salmon) Challis) Payette) Boise) (1,070,000 ac.) | 1,070,000 | 3,564,400 |

(Manti-LaSal and Bridger Engelmann spruce projects not included in priorities because they are FY 1963 projects)

*Split projects

REASONS FOR CONTROL PRIORITY SELECTIONS

Priority #1

North Slope - Wasatch National Forest - Mountain Pine Beetle

This infestation has been rated highest priority for two reasons. First, It is the largest infestation of bark beetles in the region and therefore with the largest reservoir of beetle population it poses the greatest threat to all resources. We do not feel we can ignore this potential. Secondly, we have invested nearly two million dollars in this project already. To allow this infestation to go completely unsuppressed would probably undo what has been accomplished to date.

Rather than to attempt to cover the entire 75,000 acres we feel that it may be possible to contain the infestation within its present boundaries by the treatment of 54,700 trees at the cost of \$300,000. This will treat the trees within a two mile boundary around the east, south and west sides of the infestation. The north side is bounded by nonforest type.

Priority #2

North Teton - Mountain Pine Beetle

The Buffalo and Gros Ventre districts on the Teton National Forest contain just short of 50,000 infested trees almost all within sight of the main highways. This area is second only to the Wasatch National Forest North Slope infestation in numbers of trees infested. It is one of the heaviest used recreational areas in the region. Its importance is enhanced by its proximity to the adjacent national parks. An infestation of similar size and virulence exists on nearby Grand Teton National Park. The Grand Teton infestation will undoubtedly rate high priority in the Department of Interior program. If we do no control, we are likely to be severely criticized for allowing the infestation to spread unchecked to park lands. The potential of the combined NPS and Teton National Forest infestation is certainly sufficient to destroy all of the mature lodgepole pine on the Grand Teton National Park and the Teton National Forest and spread into Yellowstone National Park. A small part of this infestation is in the Teton Wilderness Area on Pilgrim Creek.

Priority #3

Provo River - Mountain Pine Beetle

The Provo River outbreak has spread from the east side to the west side of the canyon and is building up in several other spots in the Provo River drainage as well as the Weber River drainage. Numbers of infested trees increased tremendously this year. Biological analysis of the infestation indicates this trend of infestation will, in all likelihood, continue.

Important recreational resources as well as timber resources are threatened. There is some possibility of assisting control with sales.

Priority #4

Summit Springs - Mountain Pine Beetle

This outbreak is in the area on the north slope of the Ashley National Forest from the Wasatch National Forest boundary to the Summit Springs Ranger Station. This area has a high recreational potential. Although the infestation is at some distance from major planned Flaming Gorge recreational developments, it does threaten proximal scenic values. Most of the Flaming Gorge developments will be outside of the lodgepole pine type.

Although timber sales on the Manila District are now at a low ebb because of distance from a market, the timber use potential is high. Besides, an unsuppressed outbreak would soon spread west to threaten the entire north slope lodgepole pine type to the same degree as the nearby Wasatch infestation.

The timber stands on the Manila District contain a greater percentage of other species as well as younger age classes of lodgepole pine and therefore would not be so badly damaged as the overmature stands such as predominate in the area threatened by the Provo River outbreak.

Priority #5

Targhee - Mountain Pine Beetle

The infested area on the Targhee National Forest is in several spots along the forest boundary south, east and north of St. Anthony. In some areas the outbreak extends on to private and state land. We can gain future protection from infested trees on alienated land best by example, and simultaneously obtain current protection.

The forest expects to sell approximately half of the total number of infested trees. Without treatment of the small trees and other unmerchantable material, the benefits from logging will be lost. Where we move logging into an infestation it is not unlikely that private owners will follow the example and market some of their infested trees also. We can obtain some value from the infested resource and reduce the cost of treating by so doing. The infestations on the Targhee National Forest offer this opportunity.

Priority #6

North Slope - Wasatch Mountain Pine Beetle

The containment proposal listed for this area as first priority would not substantially reduce the insect population reservoir. It would, at best, isolate it and halt its spread for one generation. The suppression of the outbreak could only be obtained with additional funds. Another \$737,000 would finance the treatment of the core of the advancing western front and should effectively reduce the total population. It would isolate national forest lands from private lands northwest of the forest which will not receive treatment; and it would permit utilization of the remaining green timber so that the public gains some benefit from the resource.

Without a major suppression effort we would expect that more than 300,000 trees will be killed next year.

Priority #7

Yellowstone - Hell's Canyon - Mountain Pine Beetle

Some trees have been killed in this area annually for many years with little fluctuation in numbers from year to year. Thus, control has not previously been recommended because natural control factors were at least holding the infestation in check. This year the cover popped off and a serious increase has occurred. The stand is overmature and susceptible, the average trees being larger than those in most of the other lower elevation stands. Timber values are high although present utilization is limited by poor market conditions. The infestation is one of a number of similar infestations along the south side of the Ashley National Forest which threaten the vast area of the lodgepole pine on the south slope of the Uinta Mountains.

Recreation use is moderate though important locally.

Priority #8

Moon Lake - Mountain Pine Beetle

Actually this is almost an extension of the Oweep Creek infestation which lies upstream a few miles. We feel the Moon Lake infestation is most urgently in need of control because of the heavy recreational values involved. Treating of the infested lodgepole and ponderosa pine this year would be a continuance of operations begun in and around this area last year. Timber stands, both lodgepole pine and ponderosa pine in the Moon Lake area, are important scenically and aesthetically because of the campsites and other recreational developments dependent on them. Adjacent commercial timber stands are threatened.

The Moon Lake drainage is an important gateway to the High Uintas Primitive Area as well as of growing importance recreationally to people from the entire Uinta Basin including Vernal, and from the Salt Lake and Utah County urban areas.

Priority #9

Spruce Budworm - Salmon-Targhee (352,000 acres)

Our air control operations of 1955 through 1957 were highly successful in preventing extensive losses of both mature timber and reproduction on the Payette, Boise, Salmon, Challis, Sawtooth, and Targhee National Forests.

We recommend similar strategy for preventing timber losses in the present infestation of spruce budworm which occupies roughly a million acres on some of the same areas which were infested before. Thus, the 352,000 acres recommended for treatment in 1962 include the heavier infestation where timber values are high and we feel that losses are imminent.

These areas also are highly valuable for their recreational, scenic, and aesthetic properties. However, because spruce budworm damage will be spread over much wider areas and scattered, we feel that any losses which occur may be more easily absorbed than bark beetle losses where killing takes place in one year. This partial project is broken on natural control boundaries which lessens if not eliminates the chance of re-infestation from the remaining untreated areas which lie mostly south and west of this proposed partial treating project.

Priority #10

Oweep Creek - Mountain Pine Beetle

This infestation is entirely within the present primitive area boundary. Treatment of the area will be difficult and expensive.

This infestation is a threat to the remainder of the lodgepole pine within the primitive area as well as the stands adjacent to it in the Lake Fork drainage. Several areas exist within this outbreak wherein all the larger trees have already been killed. It is possible but not probable that this outbreak will remain confined to its present vicinity and gradually subside because of lack of host material. The potential to spread is great because of the large number of trees infested.

The fact that this area is being considered for elimination from the primitive area testifies to the lack of high scenic and recreational values, nevertheless if withdrawn, it will still remain an important access route needing protection for scenic values.

Priority #11

McCall - Mountain Pine Beetle

This outbreak is entirely on private land. It is an ultimate but not immediate threat to national forest land at least six miles distant. Treatment of this infestation would be a cooperative project involving the private owners, the state and the Forest Service. Our share would be approximately 25% of the total cost.

There is some doubt that the State of Idaho will consider control work on this area. We do not feel that either the private or national forest timber values threatened are sufficient to warrant action on our part except on a cooperative basis. If the landowners or the state decide to do control we will be more or less obligated to contribute to the cost of the project.

Priority #12

South Teton - Mountain Pine Beetle

Suppression work has been done on the Hoback District for three to four successive years but the outbreak has continued to persist.

The lodgepole pine on this district occurs primarily in small stands dispersed through large nontimbered areas.

Suppression of this outbreak is important mainly in the reduction of hazard to other areas. Most of the areas have some recreational use but the susceptible type is so scattered that its loss would not be especially noticeable.

We feel that one or two years without suppression would not greatly affect the amount of loss and that the spread would not be rapid.

Priority #13

Skinner Co-op. - Mountain Pine Beetle

This is a new and relatively small isolated infestation which appeared this year about four miles from a similar one on the Cache last year. The Cache personnel obtained good control through their ability to dispose of the infested trees to local mill operators plus a little supplementary chemical treatment. Since the opportunity remains to dispose of nearly all of the merchantable size newly-infested trees this year and because area of timber type threatened is not large, the recommendation for treatment is fairly well down the list and only for sufficient funds to clean up scattered and unmerchantable trees which would remain after the logging operation.

Priority #14

Minor Mountain Pine Beetle Projects

| <u>Minor Projects</u> | <u>Est. No. Infested Trees</u> | |
|--|--------------------------------|--------------|
| <u>Mountain Pine Beetle (lodgepole pine)</u> | | |
| <u>Cache National Forest</u> | | |
| *Copenhagen Basin | 800 | |
| *Cottonwood - Dry Canyon | 2,500 | |
| *Mud Flat - Mill Hollow | <u>350</u> | |
| Total | | 3,650 |
| <u>Caribou National Forest</u> | | |
| *Crow Creek | 500 | |
| Diamond Flat | <u>350</u> | |
| Total | | 850 |
| <u>Ashley National Forest</u> | | |
| Blanchett Park | 300 | |
| An-Kar Guard Station | 1,000 | |
| Timothy Creek | 2,000 | |
| Rock Creek | <u>500</u> | |
| Total | | 3,800 |
| <u>Sawtooth National Forest</u> | | |
| Warm Springs | 500 | |
| Total | | 500 |
| <u>Payette National Forest (2nd growth p.p.)</u> | | |
| McCall | 500 | |
| Total | | <u>500</u> |
| Grand Total | | <u>9,000</u> |

*Estimates based on ground evaluations.

Those not starred based on aerial estimates.

The explosive increase of mountain pine beetle activity this year has created problems in many areas besides those proposed as separate projects. It has been impossible to complete ground examinations of all of the known problem areas to determine the relative seriousness of each.

The General trend indications however are for extreme buildup in all areas so any of these minor projects may have as much potential as the projects listed ahead. Without complete evaluations it is impossible to recommend them as individual projects.

The projects listed above are nearly all at least two years old and therefore they have already caused some damage. These so-called minor infestations on the other hand are all new, and although not desirable, we feel that they can be deferred until more is learned about them.

These eleven areas, plus the others proposed for control, point up the need for the forests to do all possible suppression possible through management practices.

Priority #15

Miners Gulch - Mountain Pine Beetle

Since this infestation is relatively isolated and the timber is not too important aesthetically, being more or less off the "beaten track" and above the valley bottom, the area is placed quite low on the list of priorities. The infestation has within the last three or four years killed much of the overmature timber in the stand. The current year's infestation has a good chance of knocking out the remainder of the mature and overmature trees. Because of its relative isolation, it is not felt that the infestation poses much of a threat to timber either in Rock Creek or the surrounding drainages. However, this large reservoir of insects is sufficient to carry an infestation to outlying, heavily timbered areas in more valuable locations, and this has been known to occur. Recommendation for control is based on this safety factor.

Priority #16

Spruce Budworm (remaining area 1,070,000 acres)

This is the remainder of the million acre-plus spruce budworm infested area after selection of the more important areas as an earlier priority. The total area comprises all of the light, moderate and heavily infested areas in drainages containing some heavier infestation. The danger of tree-killing is less imminent in these areas and the values to be protected are not as great as those in the smaller area recommended previously. We feel, therefore, that these infestations are the least dangerous in the region, but that they are still in need of control to reduce the potential and should be treated in case funds are made available.